### NUMBER26

Territorial Exclusion and Violence: The Case of São Paulo, Brazil

### Raquel Rolnik



Project on Urbanization, Population, Environment, and Security.
Supported by the U.S. Agency for International Development through a cooperative agreement with the University of Michigan's Population Fellows Program.

WOODROW WILSON INTERNATIONAL CENTER FOR SCHOLARS

WASHINGTON, D.C., 1999



### **Comparative Urban Studies Occasional Papers Series**

This publication is one of a series of Occasional Papers on Comparative Urban Studies of the Woodrow Wilson International Center for Scholars. The series includes papers in the humanities and social sciences from Fellows, Guest Scholars, workshops, colloquia, and conferences. The series aims to extend the Center's discussions of urban issues to a wider community in Washington and throughout the world, and to provide, directly or indirectly, scholarly and intellectual context for contemporary policy concerns.

Single copies of Occasional Papers may be obtained without charge by writing to:

The Comparative Urban Studies Project
Woodrow Wilson International
Center for Scholars
One Woodrow Wilson Plaza
1300 Pennsylvania Avenue, NW
Washington, DC 20004-3027

(202) 691-4235 CUSP@WWICS.SI.EDU www.wilsoncenter.org

### Comparative Urban Studies at the Wilson Center

Blair A. Ruble and Joseph S. Tulchin, Co-Chairs Christina Rosan, Project Coordinator Sabine Salandy, Project Intern Luba Shara, Project Intern

Since the Comparative Urban Studies Project's inception in 1991, we have sought to link sound academic scholarship and policymaking through international conferences, Guest Scholarships, and publications. Using a multidisciplinary, multiregional approach to urban studies, the Project engages experts from around the world in a substantive evaluation of urban practice.



The Center is the nation's living memorial to Woodrow Wilson, president of the United States from 1913 to 1921. Created by law in 1968, the Center is Washington, D.C.'s only independent, wide-ranging institute for advanced study where vital current issues and their deep historical background are explored through research and dialogue. Visit the Center on the Worldwide web at www.wilsoncenter.org.

Director: Lee H. Hamilton

**Board of Trustees:** Joseph A. Cari, Jr., Chair; Steven Alan Bennett. Vice Chair

Ex officio trustees: Madeleine K. Albright, Secretary of State; James H. Billington, Librarian of Congress; John W. Carlin, Archivist of the United States; Penn Kemble, Acting Director, U.S. Information Agency; William R. Ferris, Chair, National Endowment for the Humanities; I. Michael Heyman, Secretary, Smithsonian Institution; Richard W. Riley, Secretary of Education; Donna E. Shalala, Secretary of Health and Human Services

Trustee designated by the president from within the government: Samuel R. Berger, National Security Adviser

**Private citizen trustees:** Daniel L. Doctoroff; Jean L. Hennessey; Daniel L. Lamaute; Paul Hae Park; Thomas Reedy; S. Dillon Ripley

The Wilson Council: Albert Abramson; Cyrus Ansary; J. Burchenal Ault; Charles F. Barber; Theodore C. Joseph C. Bell, Esq.; John L. Bryant, Jr.; Conrad Cafritz; Nicola L. Caiola; Raoul L. Carroll; Carol Cartwright; Albert V. Casey; Peter B. Clark; William T. Coleman, Jr.; Michael D. DiGiacomo; Frank P. Doyle; Donald G. Drapkin: F. Samuel Eberts III: I. Steven Edelson: John Foster; Barbara Hackman Franklin; Bruce Gelb; Jerry P. Genova; Alma Gildenhorn; Joseph B. Gildenhorn; David F. Girard-diCarlo; Michael B. Goldberg; Raymond A. Guenter; Robert R. Harlin; Verna R. Harrah; Eric Hotung; Frances Humphrey Howard; John L. Howard; Darrell E. Issa; Jerry Jasinowski; Brenda LaGrange Johnson; Dennis D. Jorgensen; Shelly Kamins; Anastasia D. Kelly; Christopher Kennan; Steven Kotler; William H. Kremer; Kathleen D. Lacey; Donald S. Lamm; Harold Levy; David Link; David S. Mandel, Esq.; Edwin S. Marks; Robert McCarthy, Esq.; C. Peter McColough; James D. McDonald; Edwin S. Marks; Phillip Merrill; Michael W. Mitchell; Jeremiah L. Murphy; Martha T. Muse; Gerald L. Parsky; L. Richardson Preyer; Robert Quartel; Edward V. Regan; J. Steven Rhodes; Edwin Robbins; Philip E. Rollhaus, Jr.; George P. Shultz; Raja W. Sidawi; Ron Silver; William A. Slaughter; Timothy E. Stapleford; Linda Bryant Valentine, Esq.; Deborah Wince-Smith; Winokur, Herbert S.



**Rolnik, Raquel.** *Territorial Exclusion and Violence: The Case of Sao Paulo, Brazil.* Washington, D.C.: Woodrow Wilson International Center for Scholars (Comparative Urban Studies Occasional Papers Series, 26), 1999.

Papers do not represent an official position of the Woodrow Wilson International Center for Scholars, the U.S. Agency for International Development, or the University of Michigan. Opinions expressed are solely those of the authors.

### **About the Author:**

### Raquel Rolnik

Raquel Rolnik (born in São Paulo in 1956), is a Brazilian architect and urbanist, living in São Paulo, where she started her career in 1979, after receiving her degree from the University of São Paulo. She received her Masters Degree from the same University in 1981. She went on to complete a Ph.D. in Comparative Urban History at the History Department of New York University. Since 1985, she has been a Professor of Urban Planning and Management at the Faculdade de Arquitetura e Urbanismo of Pontifícia Universidade Católica de Campinas where she coordinates the Graduate Program in Urbanism. Raquel Rolnik is an international consultant for urban and housing policy. From 1989-1992, Rolnik held a public post as Director of Urban Planning for the city of São Paulo. She is the author of several articles on urban studies and has published two books: *O que é cidade* (Brasiliense) and *A cidade e a Lei* (Studio Nobel).

### Executive Summary

One of the single most defining features of Brazilian cities today is their dual built environment: one landscape is produced by private entrepreneurs and contained within the framework of detailed urban legislation, and the other, three times larger, is self-produced by the poor and situated in a gray area between the legal and the illegal. In addition to being an expression of economic and social disparities, this contrast has profound implications for the form and function of the cities. The sprawl of what are here termed "precarious peripheries" has led to a great disconnection of poorly urbanized spaces from the city center where jobs and cultural and economic opportunities are concentrated. The effects of this persistent "territorial exclusion" are devastating and occur in both the peripheries and the city center.

This paper explores the nexus between risky urbanization and the urban violence that seems to be the most recent and visible face of this model, using the concrete example of different cities in the state of São Paulo. It is important to understand how patterns of economic development and population trends have contributed to the generation of risky urbanization and how planning and urban management policies interact with it.

### Territorial Exclusion and Violence: The Case of São Paulo, Brazil

### by Raquel Rolnik,

Professor of Architecture and Urbanism

Pontifica Universidade Catolica de
Campinas, São Paulo, Brazil

Prepared for the Woodrow Wilson
International Center for Scholars,

Comparative Urban Studies Project,

Washington, D.C., 1999

One of the single most defining features of Brazilian cities today is their dual built environment: one landscape is produced by private entrepreneurs and contained within the framework of detailed urban legislation, and the other, three times larger, is self-produced by the poor and situated in a gray area

between the legal and the illegal. In addition to being an expression of economic and social disparities, this contrast has profound implications for the form and function of the cities. The sprawl of what are here termed "precarious peripheries" has led to a great disconnection of poorly urbanized spaces from the city center where jobs and cultural and economic opportunities are concentrated. The effects of this persistent "territorial exclusion" are devastating and occur in both the peripheries and the city center.

In the peripheries, urbanism is eternally incomplete, mostly risky, and vulnerable. The lands on which these residential markets for the poor develop are generally the most fragile, dangerous, and hard to urbanize from an environmental point of view—steep slopes, river banks, and swamps. Sometimes these areas are "protected" by environmental laws and regulations; nevertheless they often become the areas where growth is the highest in the city in terms of population and land use. The building structures are rarely stable and never really completed

(residents are continually adding makeshift additions to their homes). In these non-regulated developments land ownership is almost never recorded in city records or the land registry. Periphery residents are at great risk: houses can slide or be flooded with heavy rains; drainage and sewerage merge in the lowlands; life and health are in permanent danger. In everyday life, people lose hours on inefficient transportation systems, and live with discomfort and uncertainty about the future of their neighborhood.

But risky urbanization has an impact on the whole city. By concentrating assets in a small area and preventing all citizens from sharing these resources, the best-equipped spaces of the city become threatened by real estate pressure, congestion, and crime. When the erosion caused by deforestation and urbanization of slopes accumulates in lowlands, rivers, and streams, the whole city suffers from floods. When too many people from the peripheries commute to the center, traffic jams are created that stop circulation in the whole city. Therefore, territorial exclusion is more than an image of inequality; it condemns the entire city to risky urbanization.

This paper explores the nexus between risky urbanization and the urban violence that seems to be the most recent and visible face of this model, using the concrete example of different cities in the state of São Paulo.<sup>2</sup> It is important to understand how patterns of economic development and population trends have contributed to the generation of risky urbanization and how planning and urban management policies interact with it.

The empirical base of this paper is research designed to evaluate the impact of land regulations on the functioning of residential markets in cities with more than 20,000 residents in the state of São Paulo. It

was conducted in 1997-98 and supported by Fundação de Amparo a Pesquisa do Estado de São Paulo and the Lincoln Institute of Land Policy. The basis of the research was a survey applied to 220 cities that were responded to by 118 cities.<sup>3</sup> By using the data from this survey combined with a special cross analysis of the 1991 Census, we were able to evaluate the extent to which planning and land-use control instruments—which in principle are designed to provide environmentally sound and socially balanced cities—had achieved their aims in the cities of the State of São Paulo.

The survey explored the existing planning processes and urban regulations in the cities and the conditions and timing in which they were produced and implemented. With this information, the cities were organized according to the existence of different land use control regulations, in such a way that the cities were ranked from the "most regulated" to the "least regulated." The 1991 Census special cross analysis was used to construct an indicator of territorial exclusion using information on household conditions. For this purpose, a matrix was constructed of four sets of information (housing conditions, location, infrastructure availability, and number of rooms), transformed into dichotomous variables (adequate or inadequate).<sup>5</sup> The indicator measures the percentage of urban households in a given city excluded from basic urban services. The "excluded" territories could be part of inner city slums, illegal parcels in the peripheries, or other informal housing marked by some form of precariousness of the built environment.

The concept of territorial exclusion was forged in order to overcome the difficulties of dealing with traditional indexes of infrastructure coverage and general indicators of household conditions that do not truly express the differences in urban conditions within a given city. By superimposing the indicators, we could more clearly draw a picture of where

urbanization was "complete," and where it was precarious for some reason. At the same time, this concept was intended to try to measure urban segregation, since this data can be also crossed with family income, head of family, race, and other economic and social variables.

We have chosen the term "territorial exclusion" for the obvious purpose of linking it with the concept of social exclusion, rather than poverty or class disparities. This concept, which relates the accumulation of handicaps of all sorts to the lack of social ties, has been increasingly used in public policies and can be understood as the denial of (or the disrespect for) social rights of each citizen to a minimum standard of living, as well as to participation in social and professional institutions and networks (Castel 1995; Paugam 1996). Social exclusion, then, is seen as a way to analyze how and why individuals and groups fail to have access to or benefit from the possibilities offered by societies and economies. The notion of exclusion links together both social rights and material deprivations, so it encompasses not only the lack of access to goods and services that underlie poverty and basic needs satisfaction, but also exclusion from security, justice, representation, and citizenship (Rodgers 1995).

Our hypothesis is that in Brazilian cities, social exclusion has a very clear territorial expression, and territorial exclusion is one of the most powerful mechanisms for producing social exclusion.

In order to best analyze the research findings, we also crossed this data with additional data about the cities: population growth rates, value added per capita, municipal revenue per capita, and percentage of family heads with less than two times

the minimum wage income. All the information was worked on a GIS database to create a map of territorial exclusion in the state of São Paulo. In the second phase of the same research, case studies were done of three cities chosen from the 118 respondent cities (taken as representative of the different patterns of territorial exclusion found in the first phase) to deepen the analysis, focusing on each city historically and in more detail. Finally, specifically for "The 21st Century Urban Agenda: Urbanization, Population, the Environment and Security Research Working Group," we crossed the data with available indicators of urban violence.

### São Paulo: The Context8

Located in the Southeast region of Brazil, the State of São Paulo is South America's richest state—the industrial engine that powers the Brazilian economy: 30 percent of Brazil's fifty largest companies are in São Paulo, as is 50 percent of the nation's industry. The state's 36 million inhabitants represent about a quarter of Brazil's population, yet the state contributes 40 percent of federal tax revenues. A highly capitalized agricultural sector produces 80 percent of Brazil's oranges, 50 percent of its sugar, 40 percent of its chicken and eggs, and 22 percent of its coffee.

This economic preeminence is relatively recent. For over three hundred years the area comprising today's state of São Paulo remained a backwater. The inhabitants were a hardy people, of mixed Portuguese and Indian origin, from whom emerged the *bandeirantes*—frontiersmen who roamed far into the South American interior capturing Indian slaves and seeking out precious metals and gems as they went. The expansion of coffee plantations westward from Rio de Janeiro along the Paraiba Valley sparked



São Paulo's economic development. By the end of the nineteenth century, the state had become the world's foremost producer of coffee. During the same period, Brazil abolished slavery and the plantation owners recruited European (mostly Italian) immigrants to expand production. Riding the wave of the coffee boom, British and other foreign companies took the opportunity to invest in port facilities, railroads, and power and water supply, while textile and other new industries emerged. Industrial production for domestic consumption initiated after WWI generated an industrial boom.

The crisis of the 1930s brought about the end of an economy based exclusively on the export of agricultural products and established industry as a dynamic source for the Brazilian economy. São Paulo became the leader of the industrialization process. From 1930 to 1970, the so-called stage of commercial integration saw a brutal concentration of industry in São Paulo. Contrary to the first industrialization, which took place in the beginning of the century along the railroad lines, this new industrial wave followed the paths of roads and highways begun in the 1950s that connect the main industrial centers of the State. In the early 1970s, the largest municipalities of the metropolitan region (São Paulo, Osasco, Guarulhos, and the ABC [Santo Andre, São Bernardo, and São Caetano]) were already united, and population growth rates were steadily high.9

After the early 1970s, a new stage of productive integration took place in the Brazilian economy. Due to strategic decisions to seek new sources of raw material, cheaper labor, and new consumer markets, as well as federal policies aimed at redressing regional imbalances, the process of industrial decentralization was launched. In fact, a rapid industrial deconcentration within a radius of

100 to 150 km around the State capital followed, and industrial and agro-export centers, such as Campinas, Riberão Preto, Sorocaba, and the Paraiba Valley, undermined the vigor of the metropolitan region of the capital. Particularly after the oil crisis of the 1970s, a federal policy devoted to replacing oil with sugar-cane alcohol as a source of energy highly subsidized the expansion of sugar cane plantations and sugar and alcohol plants. That policy completely changed the economic base of large agricultural regions of the state, especially around Ribeirão Preto and Campinas.

Currently, many of these centers compete with the capital city in terms of social and economic power and modernity. This wealth attracts migrants from poorer regions of the State as well as the southern part of the country. The studies of the 1980 demographic Census indicate that agroindustrialization and mechanized farming in the countryside in the south of Brazil led more than four million people away from agricultural regions in the 1970s. From this contingent, less than half went to the agricultural frontier of Center-west and the Amazon; the majority had the metropolitan region and nearby provincial cities of São Paulo as their destination (Gunn 1998). In the mid-1970s, however, the international oil crisis and spiraling interest rates slowed growth and soured the economy. To circumvent economic problems, the government increased borrowing abroad and the foreign debt multiplied. The debt service on enormous loans drained huge chunks of Brazil's export earnings and caused chronic inflation. The 1980s were known nationally as the "lost decade," marked by a brutal decline in industrial investment, recession, and high inflation rates.

The crisis of the 1980s bore heavily on São Paulo. From 1980 to 1984, four hundred thousand industrial jobs were lost in the metropolitan region



and a great shift in the structure of its labor market began to take place. São Paulo became increasingly a tertiary metropolis, losing ground as the industrial engine for provincial São Paulo cities and other states. The State itself is losing its relative importance as leader of the national economy to industrial investments in other Brazilian states, mostly Minas Gerais, Rio Grande do Sul, and Parana.

The same income disparity that has always marked Brazilian urbanization persisted in São Paulo throughout the last decades. Comparative data demonstrate that independent of demographic changes, in phases of economic growth or recession, the pattern of income distribution has remained the same: a privileged stratum of 10 percent of the total population receives 44 percent of the total income; the richest 20 percent receive 60 percent of the total, and the poorest 20 percent receive less that 2.5 percent.<sup>11</sup>

### Mapping Territorial Exclusion in the State of São Paulo

A clear picture of the regionalization of "precarious urbanization" can be gained by looking at the percentage of households with an "adequate situation" (see Map 11). The worst instances of territorial exclusion are found in the frontier periphery of metropolitan regions (Embu-Guacu—1.3 percent; Aruja—6.26 percent; Francisco Morato—7.46 percent, and also Rio Grande da Serra, Cotia, Embu, and Cajamar, among others);<sup>12</sup> but the phenomenon repeats itself in the peripheral cities of Baixada Santista, North Littoral, Campinas, Paraiba Valley, and Sorocaba. The area of

precarious urbanization exactly overlays the most dynamic and wealthiest region of São Paulo State, where the deconcentration of big industry has taken place since the 1970s. This region, from an urbanistic point of view, clearly shows the radius of an urban development pattern based on giant industry, on automotive transportation, and on the sprawling, precarious expansion of a low-income housing periphery of territorial exclusion on its frontiers.

The crossing of value added per capita (Map 12) with the previous variable reinforces the argument: among the ten cities with the greatest value added per capita in São Paulo State, six belong to the group of cities with the lowest percentage of households with adequate living conditions. In these cases, industries locate in a small city nearby and are connected by road systems to a large center (like Monte Mor in the periphery of Campinas; Maua, at the periphery of consolidated ABC; or Cubatão between São Paulo (the capital) and Santos (the port). The location of industrial plants attracts workers while simultaneously contributing to environmental degradation and the creation of illegal housing markets for the poor. These economically vibrant cities are growing at astonishing rates and increasingly inhabited by an exclusively poor population, since managers and executives live in the nearby large center or in São Paulo. This model shows one pattern of economic development, with high levels of income concentration, which leads to territorial exclusion.

Another pattern, also linked to the presence of nearby wealth, is that of tourist resorts located in the same macro-metropolis radius. Coastal cities like Guaruja (Map 3) and Caraguatatuba or mountain

resorts, like Campos de Jordao (Map 7), fit into this pattern. They were developed by real estate investors offering weekend second residences to various market segments (from middle-class apartments to luxurious condominiums and marinas); they attract construction workers and domestic servants and also function as dormitory cities for neighboring industrial centers (like Guaruja for the Santos port or Caraguatatuba for São Sebastiao). In these cases municipalities with the lowest value added per capita are neighbors to municipalities with the highest (Map 3).

This pattern of territorial exclusion has much to do with income distribution and relative poverty. As we have seen, the worst conditions in the State occur in the most developed and wealthy areas. But income distribution itself does not explain everything, since other regions of the State have more or less the same income structure; in some of them, earnings of the poor are even lower. In order to understand a model of urban development that continually reproduces new frontiers of precariousness, it is important to consider how land markets work as well as the impact of planning and land use regulations in shaping these markets.

### Urban Legislation and Informal Land Markets: The Perverse Links

Diadema typifies the process of big industry expansion in the metropolitan region. When industry came (during the 1960s and 1970s, and in the case of Diadema, until 1990), it accelerated demographic growth that generated a great horizontal expansion, which was not really urban. Diadema was a town of 12,000 inhabitants in 1960. In 1971, a new highway was built linking São Paulo to the port (Santos), crossing the city's territory and attracting small and medium industrial plants, which

were satellites to large auto assembly plants in São Bernardo. Due to its location in the periphery, Diadema received only low-income migrants. In the absence of a significant high-income group, only two land market segments were configured: one for industrial locations and another for low-income parceling and housing.

In 1973, a master plan for the city was approved and urban regulations were set up, in which more that two-thirds of the city's territorial resources, the best-urbanized area, were destined for industrial use. Apart from municipal regulations, in 1976, an environmental law designed to protect metropolitan water reservoir margins from urbanization excluded 724 hectares or 23.55 percent of city territory from any urban use except very low-density, high-income housing, a market that simply did not exist in the city.

The immediate effect of these regulations was an excess supply of land for industrial purposes (until 1990, approximately 40 percent of the total territorial resources destined for industrial use were empty), leaving a shortage of urban land destined for lowincome residential and other uses. This equation, in a context of high levels of demographic growth (20.42 percent per year in the 1960 and 11.23 percent in the 1970s) provoked an expansion in the outskirts, the non-urbanized areas, voraciously consuming all of the land not destined for industrial use, including the environmentally protected areas. With no other choice, since the land was either suited for industrial use or very expensive due to limited supply, this expansion was done, for the most part, irregularly by informal land markets and did not fit any urbanization standards.<sup>14</sup> The result was that in the beginning of the 1980s, only 30 percent of the existing streets were paved, only 50 percent of the households were connected to water supply and 14 percent to sanitation, and the infant mortality rate was 83/1000.15

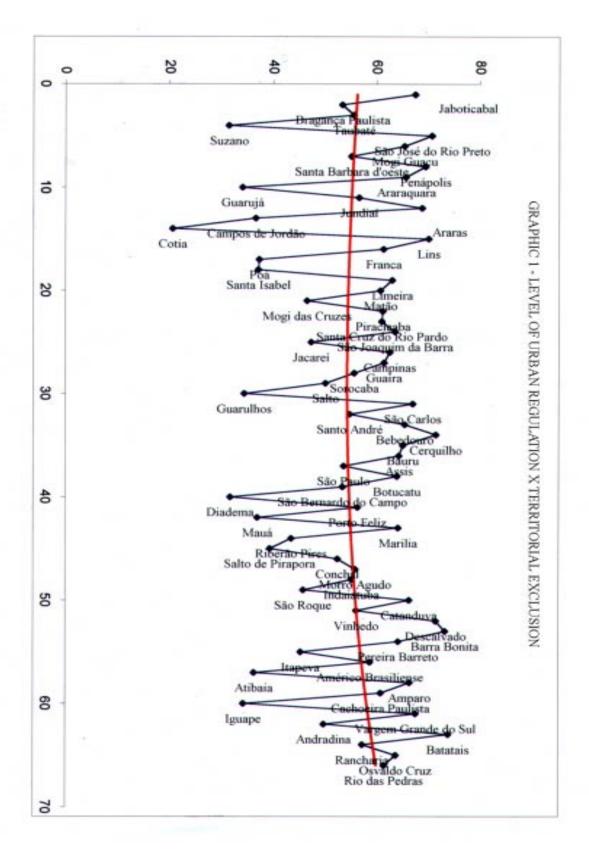
This pattern has some similarities with the case of Guaruja, located in the periphery of a rapidly growing region, Baixada Santista, where industrial plants (mainly in Cubatã) and port facilities (Santos) were based. Workers who did not have access to land and housing in urbanized Santos settled in the northwestern part of the neighboring island of Guaruja, forming the nucleus of Vicente de Carvalho, close to the channel that links the island to Santos. Like Diadema, in the 1960s and 1970s, the city of Guaruja attracted only low-income migrants, since management and technical employees settled in Santos or São Paulo.

But Guaruja is a "bedroom community" and a resort area, making use of its southeastern beach, A Perola do Atlantico. 17 In this case, the strategy of Guaruja's master plan (approved in 1978) and urban regulations was to preserve the best-urbanized lands for the resort and simply "forget" low-income residential markets, within a context of demographic growth.<sup>18</sup> Therefore, the urbanized seashore, which always had water supply and sanitation, paved and lighted streets, and steady investment in urban comforts, was micro-zoned for the different veraneio (vacation homes) market segments, blocking access for low-income residential markets. This was accomplished by creating very detailed urban patterns that were completely unrelated to the economic and spatial logic of low-income settlements; for instance, a 500 square meter minimum for single family homes, multistory apartments, and so on. At the same time, lowincome settlements for the permanent population expanded over swamps in Vicente de Carvalho, and favelas were formed on hillsides overlooking the continent. With this pattern, it was possible to protect investment in weekend resorts and prevent the "invasion" of wealthy urbanized areas by the poor.

In both of the above cases, a perverse mechanism sets up an invisible wall through urban regulations that keeps poverty away from the best-urbanized areas and reserves them for the formal markets, while continually opening peripheries for the informal markets. The mechanism is even more perverse if we take into account that the "frontiers" opened to the informal markets are leftovers from the formal markets, due to difficulties in development or to environmental restrictions.

The examples of Diadema and Guaruja, two municipalities with high rates of territorial exclusion, demonstrate the failure of planning and urban regulation paradigms applied to the cities of São Paulo in the 1970s and early 1980s. Graphic 1, which crosses the ranking by regulation (from the most to the least regulated city) with the ranking by territorial exclusion (from the highest percentage of adequate households to the lowest) demonstrates that there is planning does not minimize the degree of territorial exclusion. Contrary to the conventional wisdom that the problem of Brazilian cities is lack of planning, the research findings illustrate that planning had little impact on the socio-environmental balance of the cities. Within the contexts of high demographic pressure and competition for urban land, planning has been largely used as an instrument to ensure segregation and the demarcation of market segments.

What of the other end of the ranking—the cities with the best performance in terms of providing adequate living conditions for their inhabitants? Although there is no city in the State in which 100 percent of the households have adequate living conditions, the least precarious ones are located in the agro-industrial northeastern portion of the State, <sup>19</sup> known, as the "California Paulista," where



agro-business flourished.<sup>20</sup> We will take the example of the Ribeirão Preto region, where the sugar-alcohol complex was established in the 1970s, where most cities have high rates of adequate living conditions, despite the fact that income concentration is about the same as that in São Paulo and salaries are lower.

### Agro-industrial "Closed" Cities

Although the 1970s, in which the "pro-alcohol" program was launched and consolidated, were years of economic expansion, the regional population growth rate (2.45 percent per year) was less than the State average for the same period (3.5 percent a year). During the 1980s, the effects of recession were much more acute in the metropolitan region and in Baixada Santista than in Ribeirão Preto. The region continued to grow and showed population growth rates (2.59 percent) slightly higher than the State average (2.02 percent). The region attracted migrants in the 1970s and 1980s, but never at the same level as the industrial centers and their peripheries.

The explanation lies in the relationship between economic activity and urbanization. The sugaralcohol complex, as is the case with all agroindustrial sectors, has its dynamic center outside of the urban areas. The logic of locating agro-industry is based on proximity to areas that farm raw materials rather than on an agglomeration of economies. This way there is no concentration in a single pole city, but a sprawling out over different cities where the

plants are located. Land for farming has appreciated as a result of agro-industrial development, creating a barrier for urban conversion, even during cycles of economic and demographic expansion.

The labor market is mostly seasonal, during the harvest, since most of the farming has been mechanized and land has been concentrated in very large properties. During the harvest, migrants settle in camps inside the plants, or sometimes in rented rooms, mostly in the smallest cities of the region. In order to avoid the permanent settling of these seasonal workers, cities establish control posts at highways, bus and train stations, and sometimes blockades with checkpoints at the city entrances.

With less demand pressure on urban land, and therefore very low prices (as compared to Diadema or Guaruja), the income generated by agro-industrial production remains in the cities, allowing for investment in urban infrastructure, creating less disparity in relative land prices (see Table 2).

Jaboticabal is a middle-sized city in the region of Riberiao Preto, a major agro-industrial center in the northeastern part of the State, that we used as a case study. In this case, the low-income population—even considering low wages and high-income concentration—has more access to adequate housing. When the supply of urbanized land responds, for the most part, to demand, we do not see the phenomenon of super-appreciation of urbanized land; therefore, there is less territorial exclusion. However, this model has only been

supported on a regional scale, since the poor, who do not penetrate the city, settle elsewhere. Apart from that, the entire system is dependent only on sugar cane production, which has devastating environmental outcomes and is highly subsidized. Thus, the model is not sustainable.

### Territorial Exclusion and Violence in the State of São Paulo

Crime and violence in Brazil have moved to the forefront of attention for both policymakers and the public. During the 1980s, mortality rates stemming from violence shifted from fourth to second place in general mortality causes in the country. <sup>21</sup> Brazil, with a homicide rate of 23.35 per 100,000 in 1988, <sup>22</sup> is the second most violent country in Latin America (the most violent region in the world), losing only to Colombia (89.5 homicides per 100,000) in the late 1980s (Ayres 1998). With a homicide rate of 28.79 per 100,000 in 1991 and 29.70 for 1994, the State of São Paulo is above the Brazilian average and can be considered the most violent State in Brazil. <sup>23</sup>

Much has been written on the relationship of crime and violence to illegal drug use and trafficking, but it is hard to generalize since the problem of drugs affects each city differently. Most likely, both an increase in violence and in drug use and trafficking are outcomes of the same causes. Traditional explanations used to link violence to social dislocation and the inability of migrants to make the transition from rural communities to modern urban centers. In the case of São Paulo, however, the argument does not apply, since violence increased in the 1980s, when a very sharp decline

in rural-urban migration took place as the State—and particularly the metropolitan region—began to pass through its demographic transition (decline in population growth rates, fertility rates, and shifting regional patterns of migration; Berquo 1992). In fact, 1991 Census data show that the capital of São Paulo lost 900,000 inhabitants in the 1980s and its metropolitan region had a positive migratory inflow of 450,000, with most of these migrants shifting from the nucleus to the periphery of the very same region (Ribeiro and Lago 1995).

A strong argument in the recent literature links violence to poverty. This is supported by data showing that increases in violence occurred over a period where sharp increases in poverty levels also occurred. The recession of the 1980s and the effects of structural adjustment on the urban poor led to a severe shrinkage in real wages and job opportunities for large segments of the labor force (Ayres 1998). Although these assumptions are true for the case of São Paulo, absolute poverty itself cannot explain why the São Paulo metropolitan region is the most violent among Brazilian metropolises. In fact, the proportion of population below the poverty line in São Paulo in 1989 (20.90 percent) is one of the lowest among all Brazilian metropolitan regions. Salvador, with 39.00 percent of the population below the poverty line, is one of the least violent metropolises of Brazil, with a homicide rate of 17.5 per 100,000 (Singer 1997).

Surely the issue is if inequality (or relative poverty) should be taken into account in order to explain higher rates of crime, as some studies on North American cities point out (Freeman 1996). But households and individuals, depending on their vulnerability (Moser 1996) can deal with poverty, inequality, and even changes in labor market

 $Table\ 1-Percentage\ of\ households\ with\ an\ adequate\ situation.$ 

Group	City	% Adequ		Group	City	% Adequ
	Batatais	74,00			Vinhedo	56,19
	Barra Bonita	73,39			Morro Agudo	55,99
	Cerquilho	71,61			Itu	55,88
	Descalvado	71,58			São José dos Campos	55,87
	São José do Rio Preto	70,72			Sorocaba	55,76
	Lins	70,13			Taubaté	55,60
	Itápolis	69,87			Lorena	55,52
	Penápolis	69,50			Indaiatuba	55,31
	Araras	68,84			Santa Barbara d'oest	55,14
	Santa Rita do Passa Quatro	68,14			Santo André	54,88
	Vargem Grande do Sul	67,70			Caçapava	54,11
	Socorro	67,62			Votuporanga	54,11
	Ribeirão Preto	67,61		2	São Paulo	53,75
	Jaboticabal	67,51		~		53,51
	Rio Claro	67,50			Bragança Paulista	53,40
	São Carlos	67,14			Conchal	52,57
	Amparo	66,51			Taquarituba	52,22
	Catanduva	66,46			Pindamonhangaba	52,06
	Araraquara	65,71			Salto	50,18
	Bebedouro	65,58			Andradina	49,90
	Mogi Guaçu	65,43			Santa Branca	48,46
	Bauru	65,22			Jacareí	47,41
	Santos	65,12			Votorantim	47,11
	Santos Santa Rosa do Viterb	64,61				46,56
1	Assis				Mogi das Cruzes	1
1	Pereira Barreto	64,42 64,32			São Roque Itapeva	45,90 45,38
	Marilia				Ribeirão Pires	
	Mariia Botucatu	64,28				43,57
		64,08			Cândido Mota	42,96
	Barretos	63,96			Salto de Pirapora	39,46
	Osvaldo Cruz	63,87			Itupeva	38,39
	São Joaquim da Barra	63,64			Poá	37,34
	Limeira	63,12			Santa Isabel	37,17
	Campinas	62,67			Mauá	37,03
	Fernadópolis	62,07			Campos de Jordão	36,65
	Garça	62,06			Atibaia	36,38
	Americana	62,02			Guarulhos	34,46
	Rio das Pedras	61,60		3	Iguape	34,34
	Guaíra	61,56			Guarujá	34,11
	Franca	61,40			Várzea Paulista	33,38
	Jales	61,30			Diadema	31,80
	Piracicaba	61,30			Suzano	31,44
	Santa Cruz do Rio Pardo	61,08			Monte Mor	31,14
	Cruzeiro	61,03			Monguaguá	30,17
	Cachoeira Paulista	60,95			Cajamar	30,12
	Matão	60,80			Franco da Rocha	28,89
	Leme	60,34			São Sebastião	28,36
	Paraguaçu Paulista	59,93			Caraguatatuba	26,88
	Itatiba	59,50			São Vicente	26,00
	Santa Cruz da Palmeiras	58,95			Santana do Parnaíba	25,92
	Américo Brasiliense	58,88			Embú	23,06
	Presidente Prudente	58,62		4	Cotia	20,64
	Igaraçu do Tietê	57,93			Praia Grande	18,14
	Rancharia	57,41			Rio Grande da Serra	16,94
2	Valinhos	57,11			Cubatão	10,07
	Santo Anastácio	56,83			Francisco Morato	7,46
	Jundiaí	56,66			Juquitiba	6,45
	Porto Feliz	56,42			Arujá	6,26
	IBGE - Censo Demográfico 1		•	1	Embu-Guaçu	1,30

Table 2 – Relative land prices – Guarujá, Diadema, Jaboticabal (1998)

Table 2 - Relative Land Prices /1998										
	Price	Diadema	Guarujá	Jaboticabal						
	Average	R\$206.00	R\$416.13	R\$41.00						
	Most expensive	R\$273.00	R\$870.00	R\$100.00						
	Least expensive	R\$83.00	R\$10.00	R\$14.23						
	Difference between 2 extremes	3.29	37.00	7.03						

Sources: Diadema - PMD - Banco de Dados sobre o valor do preço da terra 1991/1998

Guarujá: PMG - Planta de Valores Genéricos 1998

Jaboticabal: prices research made in the city with brokers

Table 3 – Cities with the Highest Levels of Territorial Exclusion and Homicide/100,000 Rate, 1991 and 1994

		1991 Homicide	Ranking	1994 Homicide	Ranking	
Least Adequate	% Adequacy	Rate		Rate		
1. Embu-Guacu	1.3	44.95	9	25.04	29	
2. Aruja	6.26	18.85	36	33.49	19	
<ol><li>Juquitiba</li></ol>	6.45	50.68	6	36.36	16	
4. Francisco Morato	7.46	58.34	3	76.36	3	
5. Cubatao	10.07	37.42	16	31.24	20	
6. Rio Grande da Serra	16.94	30.33	19	49.35	7	
7. Praia Grande	18.14	44.95	10	14.64	48	
8. Cotia	20.64	36.89	17	20.79	34	
9. Embu	23.06	78.84	2	76.43	2	
10. Santana do Parnaiba	25.92	10.86	64	26.68	27	
11. Sao Vicente	26	20.19	31	26.68	26	
12. Caraguatatuba	26.88	45.61	8	25.65	28	
13. Sao Sebastiao	28.36	50.68	5	54.3	5	
14. Franco da Rocha	28.89	25.91	24	60.28	4	
15. Cajamar	30.12	44.78	12	29.87	25	
16. Monguagua	30.17	26.62	21	9.08	75	
17. Monte Mor	31.14	15.82	44	40.8	10	
18. Suzano	31.44	25.94	23	40.6	11	
19. Diadema	31.8	85.58	1	76.89	1	
20. Varzea Paulista	33.38	19.1	34	20.83	33	
21. Guaruja	34.11	26.34	22	35.14	18	
22. Iguape	34.34	14.38	49	11.33	58	
23. Guarulhos	34.46	44.12	13	53.89	6	
24. Atibaia	36.38	15.17	47	18.01	41	
25. Campos de Jordao	36.65	21.69	29	22.42	30	
26. Maua	37.03	58	4	38.94	14	
27. Santa Isabel	37.17	15.87	43	37.15	15	
28. Poa	37.34	39.52	15	20.62	36	

Table 4 – Cities with the Lowest Levels of Territorial Exclusion and Homicide/100,000 Rate, 1991 and 1994

Most Adequate	% Adequacy	1991 Homicide Rate	Ranking	1994 Homicide Rate	Ranking
1. Batatais	74	2.28	2	2.2	3
2. Barra Bonita	73.39	6.53	21	**	-
3. Cerquilho	71.61	5.02	15	**	_
4. Descalvado	71.58	*	-	3.7	8
5. Sao Jose do Rio Preto	70.72	6.75	24	8.71	32
6. Lins	70.13	*		4.93	13
7. Itapolis	69.87	3.04	5	5.76	16
8. Penapolis	69.5	6.25	19	6.17	17
9. Araras	68.84	9.2	38	15.08	67
10. Santa Rita do Passa	68.14	4.15	8	4.04	9
Quatro					
11. Vargem Grande do Sul	67.7	13.01	54	8.83	35
12. Socorro	67.62	9.8	41	6.17	18
<ol><li>Ribeirao Preto</li></ol>	67.61	15.89	70	18.08	74
14. Jaboticabal	67.51	6.79	25	11.33	55
15. Rio Claro	67.5	24.81	85	10.44	50
16. Sao Carlos	67.14	7.62	28	10.11	47
17. Amparo	66.51	3.96	7	1.9	2
18. Catanduva	66.46	8.6	34	6.28	21
19. Araraquara	65.71	8.43	32	13.98	62
20. Bebedouro	65.58	*	35	1.35	1
21. Mogi Guacu	65.43	6.55	23	4.57	10

<sup>\*</sup>no data available for 1991 \*\*- no data available for 94

structure in many different ways. According to Moser, the concept of vulnerability, or the insecurity of well being of individuals, households, or communities in the face of a changing environment, captures not only the status of individuals and groups, but also their means of resistance or the assets they can mobilize in the face of hardship.

The hypothesis here is that territorial exclusion makes individuals, households, and communities particularly vulnerable, creating space for violence and conflict. The nexus between violence and territorial exclusion is clear when the data on household adequacy is crossed with homicide rates for the 118 São Paulo cities surveyed (see Table 3).

Among the 28 worst situations of territorial exclusion (groups 3 and 4 in the cluster analysis in Table 1 -from Embu-Guacu, 1.30 percent of households in adequate conditions, to Poa, 37.34 percent), 25 have the worst violence indicators as well. The opposite is also true: among the 21 best situated cities in terms of adequacy, 14 are the least violent in the State. The other 7 cities have homicide rates far below the State average (around 29 homicides per 100,000). Even centers that are known drug-trafficking outposts—Ribeirão Preto and São Jose do Rio Preto—have per-capita homicide rates lower than the State average (Table 4).<sup>24</sup>

Territorial exclusion makes daily life insecure and risky. It blocks access to jobs and educational and cultural opportunities, which are concentrated in small and protected enclaves within cities. Since most residences in excluded areas are illegal and mixed use is generally forbidden by municipal land regulations, people are denied the possibility of using assets, such as home ownership, to generate money and create jobs.

Excluded territories were created without the presence of government or any official public sphere and thus were developed without any control or assistance. Public services, when they exist, are more precarious than in other parts of the city; assignment to these stigmatized territories is perceived by public employees as "punishment." More than that, living in a permanent condition of denial of basic human environmental needs makes inhabitants feel as if their lives are worthless.

Recent studies of violence show that the main victims of homicide, the leading cause of mortality for youth, are young males age 15 to 24 (Cardia 1998).<sup>25</sup> A look at the demographic trends of the cities with the worst rates of violence reveals that all of them had spectacular population growth rates in the 1970s and then started to decline in the 1980s; Diadema, Embu, Francisco Morato, among others, repeat the same pattern. These trends can be interpreted in terms of generations: violence arises in the years following population growth. Young people, born in the 1970s, lived their entire lives with territorial exclusion, and therefore, in vulnerable situations. By the end of the 1980s, when it came time for them to enter the labor market and form their families, there were no jobs and no means available to overcome the situation. Violence, with its ambiguous expression of desperation and heroism, took over.

Research findings provide evidence to link territorial exclusion and violence, and their relationship with economic development models and planning policies. But this simply indicates a special geography of urban conflict in contemporary São Paulo. In order to understand the causes of the problem and its effects on the lives of the people that live with violence, further research inside the

communities is required. Questions about community perceptions of livelihood security, the influence of the built environment, the role of police and justice, the availability of social capital can only be perceived with a more participatory and anthropological approach. Without these perspectives, it will be difficult to design policies to counter urban violence.<sup>26</sup> However, it is clear that territorial exclusion is one of the factors that creates citizen insecurity and, therefore, it is important to address the following question:

### How Can Urban Policies Counter Territorial Exclusion?

The traditional policy approach to low-income settlements has been to "forget" or stigmatize those territories in planning language (labeling them "subnormal") and to "invest them politically." To invest politically means to negotiate, mostly by trading votes in municipal elections, to provide investment in infrastructure and services as "grants" or "favors" from the mayor or city council representatives to the communities. This mechanism has been a very important source of local political power, since illegal or irregular settlements do not have the right to infrastructure or service provision as do formal developments. The illegal status of their environment makes low-income inhabitants of informal settlements even more vulnerable to clientelism. The case of Guaruja is representative of this policy approach. Some illegal settlements were even promoted by city council members or spokesmen for the mayor, who distributed counterfeit titles of occupancy for non-urbanized land.

But the case of Diadema demonstrates that a different policy approach can lead to substantial changes in territorial exclusion rates. Diadema and Guaruja grew rapidly over more than two decades and both implemented a traditional planning strategy in the 1970s. In both cases, housing markets for the poor were mostly informal. In the 1980s, however, their experiences began to differentiate: in Diadema policies were implemented to overcome territorial exclusion; in Guaruja officials continued with traditional planning strategies that exacerbated exclusion. Diadema invested heavily in land regularization, massive infrastructure provision, it urbanized its favelas and changed its urban regulation strategy, introducing into its plan instruments designed to amplify the supply of urbanized land for low-income housing markets.<sup>27</sup>

The difference between the two experiences—and their results—is mostly political. Diadema, due to its position in ABC, had experienced organization through labor unions in the early 1980s. Beginning with a fund created by the families and friends of striking union members, a network of food cooperatives, housing associations, and movements took root, generating an important source of social capital in the city. These organized groups began to demand city government intervention in urban conditions. In 1982, a local mayor was elected with the support of these networks and from that moment on, communities in Diadema became permanent interlocutors for urban policies, participating in negotiations on regulation strategies and decisions related to city investment.

In 1995, 121 favelas among the existing 197 in Diadema were urbanized: sewerage covers 60 percent of households and water supply 95 percent; 96 percent of the streets are paved and lighted; mortality rates dropped to 21/1000. Those changes in the built environment have provided a chance for the next generation to have more assets with which to face economic difficulties and to change their own perceptions of survival and self-respect.

Caught within the same policy approaches and facing its first crisis as a tourist resort, Guaruja indicators worsened: from the 17 favelas it had in 1980, there are now 57, with 47 percent of the population living in them; only 43 percent of the city is connected to water supply systems and 6 percent to sewerage.<sup>28</sup>

Territorial exclusion is not a fatality or a theme that should be addressed only in economic terms. The case of Diadema, as do other successful cases in Brazilian cities, demonstrates that investing in institution building and the commitment of local officials to share power with low-income communities is essential to change risky urbanization toward a more equitable and sustainable model, with less danger of violent conflict.

### References:

- Adorno, S. "La criminalidad violenta urbana en Brasil:tendencias y caracteristicas" in *Reunion sobre el desafio de la violencia criminal urbana*. Rio de Janeiro: Interamerican Development Bank, 1997.
- Ayres, R. L. "Crime and Violence as Development Issues in Latin America and the Caribbean". in *Viewpoints*. Washington, D.C.: The World Bank-Latin American and Caribbean Studies, 1998.
- Akerman, M. et ali *Mapa de risco da violência na cidade de São Paulo*. São Paulo: CEDEC, 1996.

- Baechler, G. "Why environmental transformation causes violence: a synthesis" in *The environmental change and security project report* Issue 4, Spring 1998. Washington: Woodrow Wilson Center, 1998.
- Berquo, E. "1991:um censo problematico". In *Novos estudos Cebrap*, n.3. São Paulo: Cebrap, mar 1992.
- Biderman, C. &Leme, M. C. "O mapa das desigualdades no Estado de São Paulo" in *Novos Estudos Cebrap* n. 49. São Paulo: nov 1997.
- Caiado, A. "Dinâmica espacial e rede urbana paulista" in *São Paulo em perspectiva* vol. 9, n.3. São Paulo: Fundação Seade.
- Caldeira, T.P.R. *City of walls: crimes, segregation* and citizebnship in São Paulo. PhD Dissertation on anthropology.Berkeley: Graduate division of the University of California, 1992.
- Cardia, N. "A violência urbana e os jovens" in Pinheiro, P.S. et alii. *São Paulo sem medo um diagnóstico da violência urbana* Rio de Janeiro:Garamond 1998
- Cardia, N. "A paz na contra mão da história" in *Ser médico*. São Paulo: Conselho Regional de Medicina do Estado de São Paulo, 1998.
- Castel, R. "La piege de la exclusion in lien social et politiques" in *Revue internacionale d'action communautaire* n° 34. Paris, 1995.

- Faria, V. "Social exclusion and Latin American analysis of poverty and deprivation" in Rodgers G. et al (ed). *Social exclusion:* rhetoric, reality, responses. Geneve: International Institute for Labour Studies/ United Nations Development Programme, 1995.
- Feiguin, D. & Lima, R. S. Tempo de Violência: medo e insegurança em São Paulo in *São Paulo em Perspectiva* 9:2. São Paulo: Fundação Seade, 1995.
- Freeman, R. "Why do so many young american men commit crimes and what might we do about it?" in *Journal of economic perspectives*, 10:1(winter), 1996.
- Fundação Seade. *Anuário estatistico do estado de São Paulo*. São Paulo: Fundação SEADE, different years.
- Fundação IBGE. *Pesquisa nacional por amostra de domicílios (PNAD)*. Brasília: IBGE, 1971, 1981, 1989.
- Gunn, P. "Uma geografia da violência na região metropolitana de São Paulo nos anos 80" in Pinheiro, P.S. et al. *São Paulo sem Medoum Diagnostico da Violência Urbana*. Rio de Janeiro: Garamond, 1998
- Homer-Dixon, T. F. "Environmental scarcities and violent conflict Evidence from cases" in *International Security* 19:1, 1994.
- Kayano, J. Evolução comparada da qualidade de vida nos municípios brasileiros 1983-1992-Diadema. São Paulo: Instituto Pólis, 1992.

- Lasher, C. "U.S. population policy since Cairo conference" in The Woodrow Wilson Center *Environmental change and security project Report* issue 4, spring 98. Washington: The Woodrow Wilson Center, 1998.
- Mattos, F. A. "Estrutura ocupacional e distribuição de renda: regiões metropolitanas de São Paulo e Rio de Janeiro" in *São Paulo em perspectiva* 9:2. São Paulo: Fundação Seade, 1995.
- Mathews, J. T. "Redefining security" in *Foreign affairs* 68, 1989.
- Minayo, M.C. & Souza, E. R. "Violência para todos" in *Cadernos de saúde publica* 9. Rio de Janeiro: Fundação Oswaldo Cruz, 1993.
- Ministério da Saúde & CENEPI Centro Nacional de Epidemiologia. *Subsistema de informação sobre mortalidade.* Brasília: Ministério da Saúde, 1980/1989.
- Moser, C. "Confronting crisis- a comparative study of household responses to poverty and vulnerability in four poor urban communities" in *Environmentally sustainable development studies and monographs series* 8. Washington: The World Bank, 1996.
- Nelson, J. "Poverty, inequality and conflict in developing countries" in *Project on world security*. New York:Rockfeller Brothers Fund, 1997.
- Paugam, S.(ed) *L'exclusion: l'etat des savoirs*. Paris: Editions La Decouverte, 1996.

- Prefeitura Municipal de Diadema. *Cadastro e banco de dados*. Diadema: Secretaria de Habitação e Desenvolvimento Urbano, 1995.
- Prefeitura Municipal de Diadema. *Sumário de dados sócio-econômicos*. Diadema: Scretaria de Habitação e Desenvolvimento Urbano, 1995.
- Putnam, R. *Making democracy work- civic traditions in modern Italy*. Princeton: University Press, 1993
- Ribeiro, L. C. Q. & Lago, L. C. "Dinâmica metropolitana e novos padrões de desigualdade social" in *São Paulo em Perspectiva* 9:2. São Paulo: Fundação Seade,1995.
- Rodgers, G. "What is special about a 'social exclusion' approach?" in Rodgers, G. et al (ed) *Social exclusion:Rhetoric, Reality, Responses.* Geneve: International Institute for Labour Studies/United Nations Development Programme, 1995.
- Rolnik, R. *A Cidade e a Lei legislação, política urbana e territorios na cidade de São Paulo*: Studio Nobel/FAPESP, 1997.
- Rolnik, Raquel & Cymbalista, Renato (ed) *Instrumentos urbanísticos contra a exclusão Social.* São Paulo: Polis, 1997.
- Rolnik, R. et alii *Impacto da aplicação de novos* instrumentos urbanisticos em cidades do estado de São Paulo. Campinas: Pontificia Universidade Católica de Campinas/ Lincoln Institute of Land Policy (mimeo), 1998.

- Singer, P. Social exclusion in Brazil. Geneve: International Institute for Labor Studies/ Labor Institutions and Development Programme, 1997.
- Souza, E. R. Homicídios no Brasil: O grande vilão da saúde pública na década de 80 in Cadernos de saúde pública 10. Rio de Janeiro: Fundação Oswaldo Cruz, 1994.
- Sposati, A. et alii *Mapa da exclusão social da cidade de São Paulo*. São Paulo: EDUC, 1996.
- The United Nations Centre for Human Settlements. 1998. *Habitat Debate: Towards Safer Cities*. Special Issue 4, n. 1 (Mar.).

### **End Notes:**

1"Periphery" here means a place on the outskirts of an existing city, where non-urbanized land was divided into small parcels and sold to poor families in installments. On these parcels, families built their houses themselves, progressively, mostly during the weekends. Sometimes parts of these houses are rented by other poor families before they get access to their own parcels, and frequently recently married sons and daughters or other relatives share the same plot, adding rooms or houses to the original one. These *loteamentos populares* (low income parcels) do not meet the minimum standards (width and length of streets, minimum parcel size, basic infrastructure provision, etc.) to be approved as developments by local authorities; therefore they are opened without being registered and recognized by the city.

<sup>2</sup> São Paulo is the name of the 9.8 million-inhabitant city, the 16 million-inhabitant metropolitan region, and one of one of the most populated and urbanized states in Brazil (35 million in 625 municipalities).

<sup>3</sup>This is the number of cities with more than 20,000 inhabitants in the State of São Paulo. Cities of this size were chosen because the Constitution of 1988 determined that all cities with more than 20,000 people are obliged to implement planning processes and urban regulations in their urban areas. Since 1975, a federal decree has restricted access to credit and loans (including external cooperation) for urban infrastructure and services to those cities which have presented a municipal master plan.

<sup>4</sup>We considered approved master plans, land use and occupation control regulations, development regulations, and other urban legislation specifically linked to environmental protection and/or directed to open access to residential markets for the urban poor.

<sup>5</sup>For instance, to evaluate infrastructure, four variables were taken into account—water supply, sewerage, waste collection, and public lighting. If the household is connected to the public water system with internal pipes, it is considered adequate; all other systems (ponds, public water faucets, etc.) are inadequate. For sewerage, sealed septic tanks or public systems are considered adequate; all other possibilities are inadequate. For waste collection, waste collected directly or indirectly is adequate; all other solutions (burnt, buried, left in empty lots, thrown in rivers, lagoons, or the ocean) are inadequate. For public lighting, electric systems with meters are adequate; all the rest (electric systems without meters, oil, or kerosene) are inadequate.

<sup>6</sup> Minimum wage in Brazil is US\$110 a month.

<sup>7</sup>We have worked mostly with homicides per capita, since these are the most reliable data to measure violence, coming from public health authorities that have a very consolidated system of registering death by cause in the State of São Paulo

<sup>8</sup>Background material prepared by Brett Bradshaw, Roberta Clemente, and Vivianne Nouvel Alessio for the Public Administration and Citizenship Project at the Fundação Getulio Vargas, São Paulo.

<sup>9</sup> In the 1960s the RMSP (Metropolitan Region of São Paulo) population growth rate was 5.53 (4.57 at the nucleus and 8.71 at the periphery). In the 1970s, it dropped to 4.48 (3.69 at the nucleus and 6.37 at the periphery). Source: Instituto Brasileiro de Geografia e Estatistica (IBGE), Demographic Census 1960, 1970, 1980.

<sup>10</sup>In the 1980s, RMSP population growth rate dropped to 1.72 (1.01 at the center and 3.08 at the periphery). Source: IBGE, Demographic Census 1980,1991.

<sup>11</sup>Fundação IBGE, Pesquisa Nacional por Amostra de Domicilios (PNAD) 1971, 1981 and 1989. The exact figures for 1989 are: the poorest 10 percent—1.3 percent; the poorest 20 percent—2.2 percent; the richest 10 percent—44.2 percent; the richest 5 percent—31.4 percent (quoted in Mattos 1995:92).

<sup>12</sup> See Table 1, Percentage of Households with an Adequate Situation (cluster analysis).

<sup>13</sup>The poorest area of the State is the Registro region (see Map 3) comprised of 14 municipalities and 226,413 inhabitants, 45.17 percent of them are considered indigent. The area around the capital, peripheral São Paulo, consists of 38 municipalities and 6 million inhabitants, 5 percent of whom are considered indigent.

<sup>14</sup> Of the 380 open parcels for which the city government has records, 290 are irregular, most of them being opened in the 1970s (118). Source: Cadastro e Banco de Dados da Secretaria de Habitação de Diadema.

<sup>15</sup>Prefeitura Municipal de Diadema, Sumario de Dados Socio Economicos, Primeiros resultados. Secretaria de Habitação e Desenvolvimento Urbano, Diadema 1995.

<sup>16</sup>Also some private container terminals (Dow Chemical, Cargill, and Cutrale) were built in Guaruja in the 1970s, making it a retroport facility.

<sup>17</sup>The first development of the beach took place in 1892, when the Companhia Balnearia da Ilha de Santo Amaro established a hotel, a casino, and 50 chalets for the *paulista* coffee elite.

 $^{18}$  Population growth rate for Guaruja in the 1970s was 5.26 percent a year.

<sup>19</sup>According to Table 1, best performances are found in Batatais—74 % (Map 8), Cerquilho—71.61 % (map 6), Descalvado—71.58 % (map 10).

<sup>20</sup>The main crops are oranges and sugar cane; there is also cattle in the northern part of the region.

<sup>21</sup>In Public Health records, the group encompasses all accidents, including traffic accidents, suicides, homicides, and other violence under the codes E800 to E999 from Chapter XVII of ICD (Souza 1994).

<sup>22</sup>Source: Ministry of Health/CENEPI (National Center for Epidemiology) 1988 (Souza 1994).

<sup>23</sup>Data available for São Paulo State for 1991-1994 (Fundação SEADE) is not available for all Brazilian States. However, comparative data on metropolitan regions and their capitals confirms São Paulo's position. Although there is an increase in all capitals of the metropolitan regions, the homicide rate for São Paulo in 1988 was 38.9, the highest, seconded by Recife (37.8) (Souza 1994). Souza (1993) and Souza and Minayo (1995) point out there is a problem with Rio de Janeiro's records, due to a bias in recording causes of death. If we take into account the number of homicides plus deaths registered as caused by firearms-whose intentionality or accidentality was ignored-the homicide rate in Rio de Janeiro in 1988 climbs to 50.3.

<sup>24</sup>*RevistaRevide* (a local Ribeirão Preto weekly magazine) issued a special number in 1998 on the rising violence in the city linked to drug trafficking. The number of homicides grew from 83 in 1994 (the last year we have comparable data for all São Paulo municipalities) to 209 in 1997; 85 percent of the victims were connected to drug trafficking.

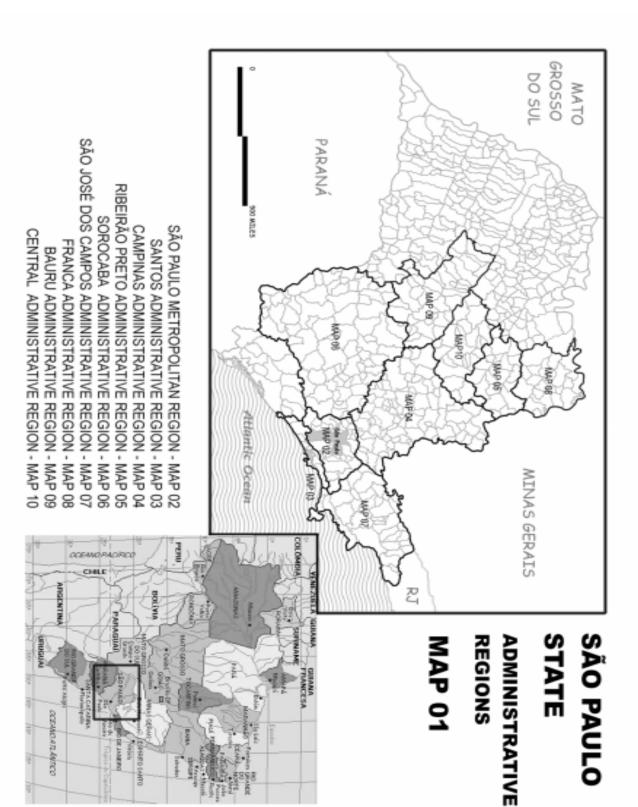
<sup>25</sup>The growing numbers of homicides among young males is an international trend. In the United States, in 1987, in the peak of crack consumption epidemics, 4,223 young males between age 15 and 24 were murdered. In the same year, in the State of São Paulo, 3171 young males were murdered (Cardia 1998).

<sup>26</sup>For instance, an Americas Watch Committee report (1987) on violence in São Paulo indicates that 23.32 percent in 1982 and 14.9 percent in 1985 of registered homicides were done by police corps, mostly the military police (Adorno 1997).

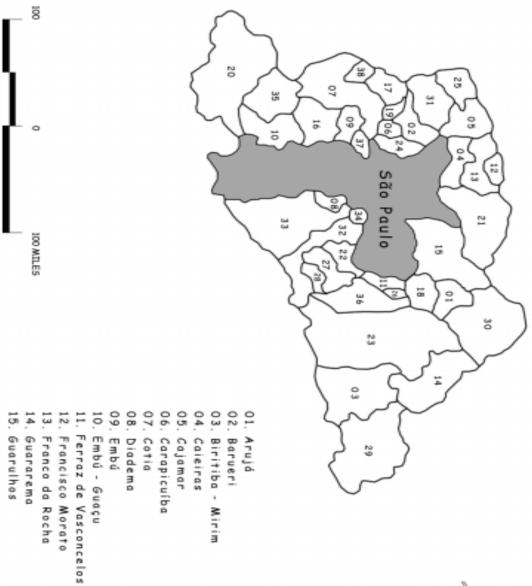
<sup>27</sup>Land formerly designated for industry was developed in Diadema as Zonas Especiais de Interesse Social (ZEIS). Loans were provided to housing associations to buy land and build houses.

<sup>28</sup>Data from Prefeitura do Municipio do Guaruja, 1998.

### Appendix



### SÃO PAULO ADMINISTRATIVE REGION MAP 02





- Itapevi
- Itaquaquecetuba
- Jandira
- 20. Juquitiba
- 21. Mairiporã
- 22. Mauá
- Pirapora do Bom Jesus
- 23. Mogi das Cruzes Osasco
- 27. Ribeirão Pires
- Rio Grande da Serra
- 29 Salesópolis
- Santa Isabel
- Santana de Parnaíba
- 32. Santo André
- 34. São Caetano do Sul São Bernardo do Campo
- São Lourenço da Serra
- Suzano
- Taboão da Serra
- Vargem Grande Paulista

### SANTOS ADMINISTRATIVE REGION MAP 03



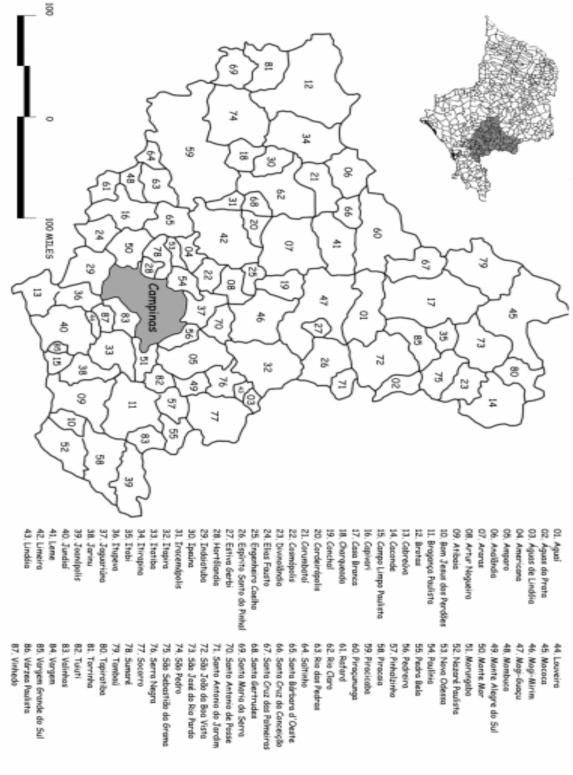


- 01. Bertioga 02. Cubatão
- 03. Guarujá 04. Itanhaém
- 05. Mongaguá 06. Peruíbe
- 08. São Vicente 07. Praia Grande

8

100 MILES

### CAMPINAS ADMINISTRATIVE REGION MAP 04



## RIBEIRÃO PRETO ADMINISTRATIVE REGION MAP 05





- Altinópolis
- 02. Barrinha
- 03. Brodósqui
- Cássia dos Coqueiros Cajuru
- 07. Dumont

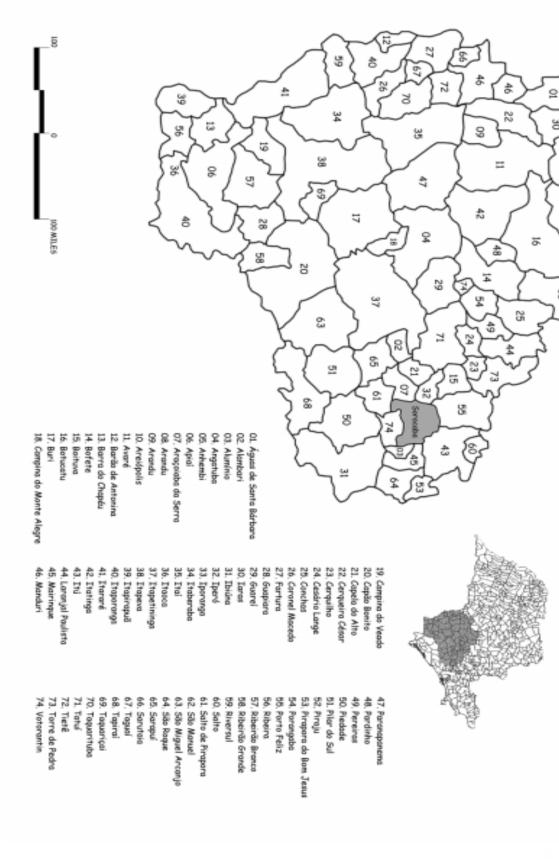
06. Cravinhos

- Guaratiba
- 09. Guatapará
- 10. Ibaté
- Jardinépolis Jaboticabal
- Luís Antônio
- 14. Monte Alto
- Pitangueiras
- Pradópolis Pontal
- 18. Santo Antônio da Alegria
- 20. Sertäozinho

8

SB7TW 001

21. Serrana





MAP 06

SOROCABA ADMINISTRATIVE REGION

8

ŝ

9

# SÃO JOSÉ DOS CAMPOS ADMINISTRATIVE REGION MAP 07





- 01. Aparecida 02. Arapei
- 03. Areias

Pindamonhangaba Paraibúna Natividade da Serra

- 05, Caçapava 04. Bananal
- 06. Cachoeira Paulista

25. Queluz 24. Potim 23. Piquete

07. Campos do Jordão 08. Caraguatatuba

26. Redenção da Serra

09. Cruzeiros Igaratá Guaratingueta 10. Cunha

> 30. São Bento do Sapucaí 29. Santo Antonio do Pinhal

28. Santa Branca 27, Roseira

- 32, São Luís do Paraitinga 31, São José do Barreiro
- 34. Silveiras 33. São Sebastião
- 36. Tremembé 35, Taubaté

Lagoinha Jambeiro Jacarei 13. Ilha Bela



Monteiro Lobato

Lorena 17. Lavrinhas

37. Ubatuba

### FRANCA ADMINISTRATIVE REGION MAP 08





- 01. Aramina 02. Batatais
- 03. Buritizal
- 04. Cristais Paulistas 05. Guará

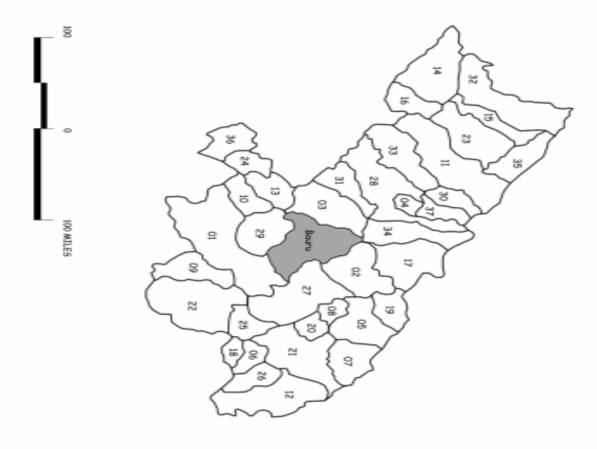
- 06. Igarapava 07. Ipuä 08. Itirapuä
- Jeriquara 09. Ituwerava
- Miguelópolis
   Morro Agudo
   Nuperanga
- 14, Orlândia
- 15, Patrocínio Paulista
- 16. Pedregulho 17. Restinga 18. Ribeirão Corrente
- 19. Rifaina

8

100 MILES

20. Sales de Oliveira 21. São Joaquim da Barra 22. São José da Bela Vista

### BAURU ADMINISTRATIVE REGION MAP 09





18. Igaraçu do Tietê	17, Tacanga	16. Guaimbé	<ol> <li>6-usiçana</li> </ol>	14. Getulina	<ol><li>Duarting</li></ol>	<ol><li>Dois Córregos</li></ol>	<ol> <li>Cafelândia</li> </ol>	<ol> <li>Cabrália Paulista</li> </ol>	09. Borebi	08. Boracéia	07. Bocalna	06. Barra Bonita	O5. Bariri	O4, Balbinos	03. Avoi	02, Arealva	OI. Agudos
37, Urú	36. Ubirajara	35, Sabino	34. Reginópolis	33, Quarantă	32. Promissão	31. Presidente Alves	30. Pongaí	29. Piratininga	28. Pirajui	27. Pederneiras	26. Mineiros do Tietê	25, Macatuba	24. Lucionópolis	23, Lins	22. Lençois Paulista	21. Jaú	20. Itapuí

18. Igaraçu do Tietê 19. Itaju

### CENTRAL ADMINISTRATIVE REGION MAP 10





- 01. Américo Brasiliense 02. Araraquara 03. Boa Esperança do Sul

- 04. Borborema
- 05. Caleiras

- 06. Cardaso Rodrigues 07. Descalvado 08. Dobrada
- 09. Dourado
- Ibitinga
   Itápolis 10. Ibaté
- 14. Nova Europa 15. Porto Ferreira
- 16. Ribeirão Banito 17. Rincão
- 19. Santa Lúcia 18. Santa Ernestina
- 20. Santa Rita do Passa Quatro 21. São Carlos

23. Toquaritinga

22. Tabatinga

8

S37ITW 001

